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The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 7>:

25 **gnm_7**

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5

The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 8>:

gnm_8

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 CCCTTACGGGCCCCCTGACCGGCGAACCGCGTGGCCCTGTTTCCATACCGCTCCACCT
 35 CAAGCCCGAGGAACCGGCGACTTGGCGATGTCGCTTATGCGCTTGGCGCCACAGA
 CGGGCAACCGGCAAAAGGGGGGGGCCATACCGCATCGCATTGGCGTGGCGCGCA
 GCTGGCTTGGCATATGGACATACAGGGCTTGTGAGCGCTGTGACGACGCTATT
 GGAAGATAACGGGGGTGACAAAGGGGAAATGGGGCGGGTTGCGGCAATACGATTTGCGA
 GATGGTGGACGGTCTGTCACAGCTGAAAAGACTCAAAATTGAGATCATGCGGAGCATCA
 40 CGGGGAGAGTTCGGCCGAACTTGGCAATGACCAAAAGATGCGGCGGTGATTGCGT
 CAAACTTGGCGGCGCTCACAATATGGCGATGACGCTCGGTTGCGATGCCCGGACAAACG
 CGGGGAGATGCAAGGGAAACCTTGAATGCTATGCGCAACCGTATAGGTT
 GAATAACGCGATATCGAGCTTACAGGGGAAAGAACCGGAGGACGAGCTGTCGGCA
 CGAGACTTAAAAAAACAGCGATGGCAAGAGCGGGAAATAGAGGGCAAAATCAAGG
 45 ACAGCTTGGCGGCACTTGGCCACGGCTGAGTGGCGCAAGGGGGGTCAAGAGCTATAT
 CGAGGTTATGGATATTACGGTTTCCGCGTCACTGTCACAGCATTCCAGCGCTTATGC
 CGCACTGGCGGCACTTGGCGGCAAGGGGGGTCAAGAGCTTACGGCGGCA
 50 CTTGGCGGATGAAAGTTCAGATGACGATCAACAGGAAATGGATGCTGTTGGCGAAGGTGGAAAT
 CGCGGCAACTTGGGACTATAAATCATTTCTAACAGCGGCTGCACTGGCGGTTGCTCACAC
 AAACCGGTTGGCTAAATATCTTGGAGTCGAGGCAAGCAGTGCACATGCAATTGAGTT
 TCTGCAAGCGCTAACAGGCGATTGTTCCGAGGAAATCTACATCCTTACGGCAAAGG
 AAAAATCTAACATTGGCGCAAGGGCGAACGGCTGTCATTGCTTATGCGGCTAC
 CGATATGGGCAACAAACGGTGTGATCTGTTGAAATTATCACATCCGAAACGCCAAACCAATCC
 55 CGCGTGGTGAATTGGCGCTGTCAGGCGAGGGCGCGCAGGCCATACGGCAAATATATTAA

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 CAGTTGCTGCCAAAGATGCTCTGTTACAGCGCATCAAGGAAAATATCTGGCGA
 TCTCAACGACAAGCAGACATCGTTGAAGAAGTGTGTACACAGTAGGGATGGCGATAC
 CCTGCGCTTATGTCGCATGCACATTGCCAGTTGCCAGGGCATTTGCCAGCGA
 5 GTCTGCCACCTGTCGGCGATTCATCGTTGCTTTGGTAAGGAAAAGCGATATTCTTGGAGA
 GATTATCCATAGGGATACTCTGGCCGACGTTGAAAGTCCGATCCGAACAGCAGCTGGA
 TGCAAGCTGGGAAATATGACCGGCAGAAGTACCGCTCGGGCTTAAGTCCCATCGGA
 AGACAGCCACGGCTGTTGCAATGGCGCAAGCGATTCCGATTCGGTGAGCAGCAT
 10 TTAGCTGGCTGAAACCCGCTTAAAGTCCGAGGGAAAGCTGGGATTCAGGTTTGTGCAATTCAA
 ATTCTATTGAAAGTCAAGAATCTGAATCAATTGAATCAGATATTCAAATCTGCATAG
 TATTCATATATCCGAAAGTCTAGCATCGAAGTGAAGCAGGTTAACGGGTTGCCCTTGA
 TTAACAGGGCAACCGGCTTATGACCGCTCGGGCTTAAGTCCCATCGGAAATATACCG
 15 CAAGCTGGCTTCAACAAATCCGCAATGCCGCTTACATCTTACTGTTTCCGGAAAAGCAGTT
 CCCGCTGCTCCGCAATATTGTAATCCGGTGTGGCTTGCCTTGCATTGAAACAT
 CATTGCCAGCTCATCGTAGCTTCTTCTTACGTTTCCGGCCTATATGCTATT
 CATTCTCCGTTTCAGGGCAAAACCGCATCGAACAGGGGGTTCGGTAATGAGGCAATAG
 AAGCCGAAATATCTGGGTTCTCATCAATTCTGATGATAACCGGTTGGCATTTTCTT
 20 TTTGAAATTGAGTACTCTTACATTAAACCTTATAGTCTGAGACGGCGGCAACAGAAA
 TAAAAGCATCTGTTGCTGATTAACGATGACTGCGCATGCATATTTCGGCACTGA
 CGGCTTACGGGATAGCGGATATGGCTGGGAAAGCAGGGCTTGGAGCTGCGTAATCA
 GGGTACTCTGCAACGGGCGACGGCGACGGGCGGAAACGGCACGCCATTTCGGC
 TGAGGATATTGATGCTCAGGAGTCAATGGCTTAAATGTCGACCTGGGTAAC
 25 TCAAGACTTTTGGCTGGCTTGGGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTT
 ATTGGCAGGTTCCGGCATCTTCCCATACCATTTCTCCGAAGCTGTTGCCCAAG
 CGGCGATATAGCAGTATGGCTGAAACCGATGTTGGCATATTCCGGTGGGTTGGCAG
 GGTGAGGCCATTCTTCCACATTCTACGGGGGGCATGGCAAGGGGCAATTCCGGTGG
 CTGCCAGACTGGTCACTGGTCACTGGTATATCTGCCACCCGTTACAGATTGGCACGGTATTCA
 TACTTGGCCGGCAATCAGAAAATACCGGATTCGGGCTTGGCTTGGCTTGGCTTGGCTT
 30 CTTGGTGAACCGTTGGCGGCTGGCTGGCTGGCTGGCATGGAGCAGGATTGCCCTTAAAGCTGAA
 AAGTCAGGGAGAACAAAATTCACTGGTCACTGGGCTTGGCTTGGCTTGGCTTGGCTT
 CCTGTTTTCAGCTGCAACGGGCTGGCAACTGGCAAGGTTACGGCTTGGCTTGGCTT
 CACCTAAAAGAATATTGTCGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTT
 35 CACATTAAAGCATGGGATGACGGATCATGGTACGGGAAAGGAAATCTTAAATTCGGCAACGGTCA
 TCCCGAGTTTCAGACGACATATTCAAAAGCGGCAACAGCCGGAGGGAGGGAGGGAG
 GATTGTTGGAGGGCGCGTATTAGCAGAAAATAAAACCTTATCCGACAGCAGCATG
 ACGAAATTCCCAAATAAATCCGGTCAAAGGCTTGGCTTGGCTTGGCTTGGCTTGGCTT
 40 GTTCGGTTTCTGGCTGCTGCAAGACTGGCGGAGCAACTGAAAGTATAGCACAGATGTT
 GGGGATATGGAGAGATACTTGGACAGGGGAGGGAAATCTTAAATTCTGCAACGGTCTGG
 TAACAAAACAGATTACCGGATCATGGTACGGCTTGGCTTGGCTTGGCTTGGCTTGGCTT
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 45 AGTTGGAGGATGACGATGGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTT
 TAATACCGCATACGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTT
 CGGGCTGAGGAGGATGATCCGCCACACTGGGACTGAGACAGGCCAGACTCTAACGGGAG
 CGAGCAGTGGGAAATTGGCAATGGGGCAAGGCTGATCCAGGCAATGCCGGTGTCTG
 AAGAAGGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTT
 50 ACGGCTGATGACGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTT
 TAATACGTTAGGTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTT
 CTTAAGCAGGATGTAATCTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTT
 TGCACTGGTCACTGGGAGGGAGTAACTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTT
 AGGAATACCGGATGGCGAAGGGCAGCTCTGGGCAACACTGACGGCTTGGCTTGGCTT
 55 TGGGTAGGAAACAGGATTAAGATACTCTGGTAGTGTGCTACGGCTTAAACGATGTCATTAGCT
 TGTTGGCAACCTGATTGCTGGTAGCTGAGTAAACGCGTGAATTGACCGCTGGGGAT
 ACGGTGCAGATTAAACCTCAAAGGAATTGACGGGGACCCGACAAGGGTGGATGATG

TCGATTAATTGATGCAACCGGAAGAACCTTACCTGGTCTTGACATGTACGGAAATcCTCC
 GGAGACGGAGGAGTGCCTCGGGAGCGTAACACAGGTCTCGCATGGCTGCGCAGCTC
 GTGTCGTGAGATGTTGGGTTAACGCGCAACCCCTGTCTTGTACATTAGTGGCAT
 CATTCACTGGGCACTTAAATGAGACTGCCGTGACAAGCCGAGGAAGGTGGGATGAC
 5 5 TCGAAGCTCTCGGCCCTTATGACCGAGGCGTCAACACCTCATACAAATGGCTGTTACAGA
 GGGTAGCCCAACCGCAGGGAGCCAATCTCACAAAACCGATCTGAGTCGGATTCGCAC
 TCTCGTCACTGAGTGCATGAGTCGGAATCGCAGGTAGTAATCGCAGGTACGCATACTGGGT
 10 10 GAATACGGTCCCGGGCTTGTACACACCGCCGTACACCATGGAGTGGGGATACCAAG
 AAGTAGGTTAGGATAACACAAAGGAGTCCCGTACACCGTTATGCTCATGACTGGGTGA
 AGTCTGAAACACCTGAGCGGAAACCTGGGTTGGATCACCCTCTTCTAGAGAAG
 15 15 AAGAGGCTTCTAGGCATTCACTTCTGGTAAACTGAAAAGATCGGAAGAACCTTGAG
 TGAAAGGAAAGATTGCGTAAAGAAGAAATCCGGGTTGTAGCTCAGCTGGTTAGAGCACA
 CGCTGTAAAGCGTGGGGTCAAGTCCTCCAGACCCACAAAGAACAGGGGCA
 TAGCTCGTGGTAGACGACCTCTGGTCAAGCAGGGGGTCATCGGTTCTGATCCCGTTG
 20 20 CCTCCCAAATAGTGTACAAATCAGGAAAGATGGAAACAGAATCCATTCAAGGGCAG
 GTCACACTTGACCAAGAACAAAATGCTGATATAATAATCAGCTGTTTGTATTCACAG
 TAGATAGCAATATCGTACCGAGG

The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 9>:

20 gnm_9

GTAGCCGGCGCACGAAACGCCCTTGGGAGCCGATCTGGCGAACAGCCCTCCCTGCCGA
 AGAACCTGGGCATCAGCATGGCAAGTTAAAGGAGCAGCTAAAGCGTGTGGCGCGA
 CGATTGCGCTAACGCACTCTCGCGCACGGCGAACCCGTCAAGCGAACGGAGTTCGC
 CGAACGCTAACAGCGGCTAAACACGAAACTAATGCTCGAGATGATTAGGGCAGTCAACCGGA
 25 25 AGACGCTGATACCGGGATTTCGCCCCCTGGAGAACATTGAGGCCAACCGCAAAAGGAA
 CGGCCCTTGCCTCCGGCAGTAAACACGGCCGCTTCTGCTGGAACGCCATGGGGCTGACCCA
 CTTCCTTGCAGCAGCGGACATTGCGACCCCTGGCGCTGCACATTTCAAAACCGGCCCGACAT
 CTTCCTGGCAGCAGCGGAGGGCTGAGTCGGGACATCGGCAATCGGATTCAGAAGA
 30 30 AGCCGAAGACTTGGCAGGGCACATCGGCTGTTCTCGGCCACCGGGAGCTGACCTACGC
 CTACCTGCAAGCGTGTGGAAAGCTCGGGCAGGTAACACGCGTCAGATAAAAGTGTCAAG
 GAAGACAAAGACGGCTGACAGTCTTCAGCGACGGCTTTTGTCTTAAACAGAATGTA
 TAACCCAATCTACGCAACCCCTAAACAAATAAAGCCAAATCTTAAACATGCTATTAACAT
 TTATTGAAACGATTTTTCTAACACGCAACCTTAACAAATCACTATAAAATGCGCGC
 35 35 CGATGTTCTGCTCCGGCTGTATGGGGCTGGCGGACGGCGAGGCTGATTCGAGCAGGT
 GTGGGTTTCTGGTATTCGGGAGGGCTGGCTGGCTTGGCTTGTCTTCAAAAGCTGCA
 GTTGGGGAGTGGGGCGGGCGGAGGGCTGGTATGGTCTAGGTCTAGATGGCTTGGT
 TGAACCTTTTGCAGCGGGGGCGCTGAATGTTTGAGGTTCTGAAAAGATTCCTG
 CTTCGGGGAGAGGCTTCAGACGGCTTGGAAATGGTCTGGCTTGGAAATGCTTGTCCGT
 40 40 CTGGATGGCTTGGGGCAAGGCTTGGGCTGCGTACAGACGCAATTGGAGCAGGGAGTTGCTGG
 CAAGGGGGTTTGGCTGGGGCGGCTGGGCTGGCTGGGGCTGGCTGGGGCAACGATGTCGG
 GCAGGGGGTTCTGGCGCAAGGGGCTGGTGGGGATGGCCGCCAGGTGATGTTGCACGG
 GCGGGACGGGGATGGCTGGGGCTGGTGGGGATGGGGATAAAACAGTGTGAT
 GGATGCTGAGGAAATGGGGCGGACGAAGCTGGGGTTGATGGCTGATTCGAGGGAGA
 45 45 CCAAGTCCTGGCTTGGGGCAAGGCTTGGGCTGCGTACAGACGCAATTGGAGCAGGGAGTTGCTGG
 GTCCGGATGGTTTCCCAGGGCGGCTGTAATGGGCAATAATGCTTCGCCCCCTGGTTGGTCA
 GGATCCCCCTTCGCGCGCACGGCTGGGAAATGAGGAAGGTCGCTGGCTTTCAGACG
 GTCTTCTGGCTGG
 CGGCTTACGCGCATGGCTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG
 50 50 AAATCTGTCGAAGCGGCCGCTGGAGTACCGTATGGCGGGCGGAGTGGCTGAGGTAGGTT
 CTGGTGTGGCGAGTGGAGGAGCGTCACTGGCAAGCCGGCGCTGAGTGGTTGAATGT
 CCAACGGCATCTGGCGCTGGAAACCGGGATGTTGGGGCGGGCGTATTGGGCAATCA
 GGCTTCATCACGCCCTGGCCGTGAGTCGGCGACGTGGGGGATTCGTCGGCAGGTAT

GAAGACTTGGGCAGGCGCGCGATATTACGTCGCCGCCGTACGCCCGCACAAACC
 GCCAAACTCTCTTGTCAAGCCGAAAGACGGGTTATGCCGGCATGGACTTGGCGGT
 CTGGCTTTCAGACGATGGATCGTCGCGTCCGCTTCCAAGCCGAAATCGAGACGGCAA
 GCGCTCCGCGCAGGTCAAGCTTCGCGCCGTGCGAAGGCAGGCCGGCGCTGCTGCC
 5 CGTGCCTTGCAGGAATCGCGGAATACGGTACAGACATCGTGTGAGCGCAAACCATC
 CCCCTGCTGGCTGTCTGCJAATAATAGCGGCTCAGGGCAGGGGGCGGTGTGAAACACCGC
 ATGGGTTTGGACGCGCCGCTCATCAAAGACAACCCACTCGCTATTGGGAGCATG
 GCGCAACGCCGTGAGCAGGAAAACAGGGTGTGGAGCATGACTGGTGGAAATCGAA
 10 GTGGATACGTTGGCACAACCTGGAGCAAGGCACTGGCAGCGGGCGGAACGGATTGCTG
 GATAACATGGAGCAGAAACCTGGAAGAAGGGCGCAAACCGCTGCCACACGGCAAACCGCC
 CACCCCCACACCATCTATTGCGAAGGATCGGGCGCATGGCTTGACCGCTGAGGGC
 GTGGCTTGGAGGCTGGAGCAGGGCTTCTGCTGACCCACAGGAGCGGGTTCG
 TTGGACATAGGTTGGATTGTTGGCGCTGAGTTTGGGTGGGGCGCTGCTGATATG
 15 TCAGGAAGGAAACGGCTAACCTTAATCGGTTATGCTCAGGGAGGAATGCCGTG
 AAAGATTCTTCAGCGCATTTCTGTAAGGTCGTGATGCTTTAGAAAACAGCATTT
 CAGGGCAGGTTATTGTTGGCCGACAGCGCCGGCATGGTAGGGCAGGAAAAGGACG
 GGGGGCGAGGTTTATGGCTGTAAGGACCGCCCTTACGGTTTGGCAAAGAAAGATG
 GGGAAAAGGAAACATACATCTGTAACATCATGCTTAAATAATTGATTATAATACGATT
 20 ATAAAGATAATCACAAATCATCCATATCTGCCGCCGTCAATCCGTTGGGGCGCAA
 GGTTTGGAGAACCGGATCACAACTACGGCTTACACCCATACTCTAACACTTATGGCA
 TCCGGACAGTATGGCATATGATTCAATTGTTGACAGCGAACGCAATATGCCGAAC
 GCGAAAATCTTATCCGTGCCGCCACCGCATTTCAACCCATTGAAACGCCGTGCGT
 GGAAGGGTCTAGGTGATTTGGTACCCGGCATTATCGAATACCCGCTGGTTTCCGA
 25 AGAAGCGCGCGCATTCTCACACGGCTGGCATTTGGAAACAAACCGTGGCATAGTG
 TTAGAATCTTCTTCTTCCGCTGTAACGGTTACAGCAGCATTTTGGAAATGTTATG
 AAAATCACCACCTGGAAATGTCATTCGCTCAATGTGCGCTGGCAGGTGCAAACCTG
 CTGGCGAACATCGGCCGATATTGGTTGGAGGACTCAAAACTGATCAGGGAAA
 TTTCGGAGCTGGGAGATTCAATATGCCGCGCCGATGGTACGGGACTTGGGAGGGCGAAA
 30 TACAACGGCTGGCAATCTGCAAGCCGCGCATGGCGCAGGACGTGCAATTGGTTTGC
 GCACTGGCGACGATCGCAACGGCGCTGATTGGCGAACCGTCAAGCGCGTGC
 ATCAATGTCATTCGCTCAACGGCGAGGCTTGGAGACGCCAAATTCAAAATTAAGGAA
 CAGTTGGTGGCCGCACTGAGGGATTGTCGGCATGAAATGACCCGCCACGGCAAAC
 CTGTTGGTGGGGGAGTTCAATATGCCGCGCCGATGGGACTGTTACGACCCGTGAAA
 35 TGGCAGGAAAATTCACGTGTCGCTGCAAGGGCAGTGGTTCAAAACTGCTGGAT
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 GACTATGGCGCGCATGTTCAACAGGCAAAACTGGGCTGGCTATGCAACCATATTGGTG
 TCGCTGGCGCATGGCGCGGGTTGAGGATTCGCGCTGATTGGAGACCCGGCGCTG
 GAGCGTCGAGCGACACCGCGCGGTGACGGCAGATTGATGGTAAAGACCGTGT
 40 TGATAIGGGTAAACAGGATCTTCTTCACTGGGAAATTCAGGTTAATACAGGATAGCTTCTATCT
 GACTGAAAATTAATGGCTTCTTCCCGGCAAACAGGCCAAATCGGGGATTTGTC
 AGCCTATTTCCTGAAAATTTAATGAAATCATGGGTTAATGATGAGTTTGAGGAGT
 AAAATTATATGTAACATAATCAGGAAACAAACAAATTAATGAAAAGGATATTGTT
 CGATAAAATAGAAAAGCCGCTTATATATAGTAAATAAATTAACCCGTGTTTCTT
 45 CGCTTATTGTCATGGCTGAGGTTGAGGATGAAACTCAATATAACGACTGTAAAGATAA
 ATCTATGTTATGTCATGGCTGAGGTTGAGGATGAAACTCAATATAACGACTGTAAAGATAA
 AAAATCAGGACAAGGCGACGAAGCGCAGACAGTACAAATAGTACGGCAAGGGCAGGCA
 ACAGCAGTACTGGTTAAAATTAATCCACTATATAATCTGTTGAGGATGAAATGGCAAG
 TTAGTATTATATCCTTACTAATCAACAAATGAAAATCAACTGGCCCATCTCTAGCG
 50 ATCTTATTAGTGATGACAACAAATATCCAGTACCAATTGATGAGTTTTAGCATTTTC
 GATCTGTAATAATTCGAATTTCATGGCTGAAAGGATATAAATTTCACCTAGTATGTC
 AACTCATTTGTAATCTTCTTGTGATTGAGGAAATATAACCTGATGAGAA
 AGATATAAAATCTTTTCAATCCCGACAGATAACACAGATTTTATAAGGGTTTATT
 TATAAGGTTATATAGAAGGTTATATCTGAGGGATAATGGCAGCTTACACAAAT
 55 ATAGTGGATTAAATTAAACCCAGTACAGCGTGTGGCTACTATTGTAATGCTGCGGCTT
 CSGCGCTTGTCTGATTGTTAATCCACTATATGCTCATGAGTTCATGAAACGGCAA
 STCGGAAGCGTCAAACAACTGATTGCCATTGACCGGCTGATTGACGAAATTGACAAA

CAAATCGACGCCACACCCACAGCATTGACGGAAAGCCAAGTGGCAGAACAAATC
 AAAGGCATCGGTTGGATAACGACGGCTACCTGATGGCGATGCTGCCGAATTGAGGGGG
 CTGTCGCAACACGGATAGCGGGTTGGCGGATTGCCCGCACCGAGGGAGAGCGGG
 GAAACCAAAATC AAAAGCCGCTGCTTGGCGGAAGGCTCGCGTGCCTAAGGCAGTC
 5 ATGGCTACCGTGGCAGCAGCACCGTTTGGATCTTGGGATTTCACCAAGCGCC
 CTGTCGAGGGTAAAGCGCTATAAGGTTGGCGTTACCGCATGTATGCCCAAAGTCTGACG
 ATATCGAATCGGTTGGCAGATGGCTGATTATTTGCGGAAACAGCATACCGCCGAAACCGTATC
 10 TAAACGGCTTGTAGTTTGTGTTTGTGCTGGCCGACGGGTGAAAATACAGTTGCTA
 CGGCTCGATGAATCGTCAAGAAATACCTGCTCATCGTCATCCCGCAGGGTGGAAATCCAGA
 CGCGTCCGGTAAACTATACAGGTTTCTTGGATTTTCGTTGGGATTC
 15 CCACATTCTCGTGTGAATGACGGATGTAGTTCTGGGAATGACGTTGGCTCAGGTTCCGT
 ATGGATGGATTCGTCATCCCGCCAGGGGAATCTAGCTGTTGGGTTTCAGTTATT
 TGCTAATAATCTGGTCTTCTAGTTCTGAGTTCACCTTCGTTGGGAAATGACGGGATT
 TTAGGTTTCTGATTTGGTTTCTGCTCTTGTGGGAATGACGGGATGTAGGTTCTGAGGA
 20 ATGACGCTGGTCAAGGTTTCCGGATGATTGCTGATTCCTGGCAGGGGAATTC
 GTCTGTCGTTCTGGTCTAGTTTCCGAAATACTGGCTGTTCTTCTAGATTCCCA
 CTTTCGIGGAATGACGGTCTAGTGTCTACGGGTACTGTCAAGGTTTCCGGTATTTGGAA
 TTTCGGGAAACTTATGAATCGTCACTCCCGCCAGGGCGCAATCTGGAAATTCAATGCC
 CAAGAATTATCGGAAAATAAACCTTCCCGCTCAT

20

The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 10>:

gnm_10

GTCGTTCTGGTTTGATGCGCTATGAAAGAAGAAAACGACTTCGCCACATCCCTGAA
 25 GCGTTTCTTCTTCAACTCCAACTCGCTGGCGCAGGCCCTGATTTCGGTCAGGGCGCT
 AAAACATTTAGATGCCAACATGTGCGGAACCTGCCTAATGGACATCATCGTCTTAC
 TGCCAAAGGGCGGCTTACACCAAAATCGCTCTCCAAAGGCCCTGCCGACAGGGCTGGAAC
 GGCTACTGGATTGACGCCGCTCTACTGCCATGACGAGACGCCGATTATCGCTCTC
 GACCCCTGTCACCCGGATCTCTCGCACACGGCTCTAAACGGCGTGAAAACCTATT
 30 TTGGCTGAAACTGGCAACACCGATCTACCAACGGCTTCTCCGGCGGGCGAAACAC
 ATGCGCAACTCATCGGGTATGGCGCGGTTACGCCAACGGTGGGGGAGCGGCTTGC
 GATCTGCGCACTTCTCGCATTCGACGCCAAAGTATCCGAGTTTCTGCCGAGCGGA
 GACTATCGGAAAGCCAACTTCTGGCTTACGGCTCGCCGCACTGCTGATTCTGGATTGAC
 GTGGAATTGGGCAACGGCAGCTCAAGAAGRATGGAAAGGGGGCTGGAAACCAACAAA
 35 ATCTCTGGGGCTGGCAGGACAAATACCGCTGACGGCTCTGCGCTCCGGCTGGCG
 ATGCCGCTGCCAGGCCAACCTCATCTGAAAGTTGAAAAAGACCTGCTGTTCTGGAA
 ATCGAAAGATTGGCAGGCCGAAATCTGAGTTGAAAGTCTACGGTCAATGAAAAGAA
 GCGCAGCATCCACGGACTGCTCTGGCAAAAGTACCGGCCACCTGTCCGTCCTGTGG
 CGCATCCGAAACTGGCGATGGCGCAATACATCACCGGTTACCGCTGGGACCAA
 40 CTTTTGGGGGGCTGCCAACCCGCTGGCGCGCTATTGCGTATCTGTTGGGAGCGCT
 TGAGCCCTGTTGAATGGAAATGCCGTCTGAGCTGTTCTGAGGCCATTTCCTGCA
 ACCCTGCCGATAACCCCTGCCGGACTGCGCAGCTAAAATAAAGGATTCCT
 GGCGGTAIGCGGCCGACTTCTGCTACAGCGGAAATTCCGATAAGGCAAGCTTACCGGAC
 45 AACATTCTGCTCATCACCTTACATACCCCACTGCCAGGCCGAGCATGCCGTTCAAAC
 CCCGAAATGCCGAAACACAGCGGCCGGTCTCCACAAATCCGCTGTTTGGGCCAA
 CGCTGCCGAGCGCCGCGTGTCTGGGACAAACATGCCGACGCCAGGGACAGCGGAG
 CGTGGGAAAGCCCTGCCCATCTGCGTGGGAAAATATCGGGAGCTGCGGTACAAGGATG
 ATGTTGCCCAATTCTCCGCTGCTGAGATGCTGCTGATCACGCCAACATGCG
 50 GCGGCCCGGACCGTGTGGCAACGCCGAGCTATTGCGGCTATGCCGTTCAAATGCC
 GTCTGAAGGCCCTGCCATCCCTATGCTTGGACCGGCCGAGCTTCCGACATCTGC
 ACGACGGGATAACTGATGCCAACCGTCTATCCACATCTGATCTCTCCGGCATCGCT
 ATCAGCCAAAGCGTCAAATCTCGAGTTCAAAACCTGCTACACGCCCGCCTATTTCAG

CAGGTCCGGAGGTAAAGGCATGAGCAGCGAAGCGGGTAGCCTAATATGGCGAGAC
 GGTAGGCAGGCAAAATATCACCACCGCCAGCGCTTCCAAACCCAAACATTGGA
 CGCAATCAGCAGGGCAGGCAAATCAGCACCCACACCAAGCCATATCGGGTTGC
 5 CTTGGCGGAGGCAAGGCAGGCATCGCATCGCGACACATAAATATCGCCACACCAACAT
 CGGAGGATAACCGAGCAGCGACGACCCATCGCGCCATTCTCTGTTTCCGTCACATT
 CCAATCATATTACCAAAACCTTATTCCGCAAGCATAGTCATCTCCAGCACAGCGCG
 CAIAGTCAGAAAATTTCATCTTATAAAACCGTGCAGGACACGGCTTGGCACCAAAGTT
 CGGGCTAACCATCTGATATCGATGCCACCCGACATCTTCGCAACCCCTGCCCTC
 10 GGTGCTCACCAGTGTAGCTTGCGCTTGCATTGCCGAAAGACAGGCTGCTGTT
 GAAATCTCCGTCCAGTCCAAATCAGCCCGTGCATATCATAAAC

The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 11>:

gnm_11

GGAATTCTGTCAAGCTTCTGTGTGAAAATTTCAGTGGAAACGTGGACGGCGG
 15 TTGACGATGACATACCACTGTTCGGAATATCCATTCTGTCAGCCTGTCGCCATACCC
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 CGAATCATATTAGCTGCGCTGCGTACAGCAGGCACTGCCACCAACGGTCAACACCA
 AACGGTGGCCATCGGAGCTTCGCCGCAAACCCGCCCTGTGGGATTTTTTGTC
 20 CAGCCATATTCCACCGCCGGGGTTGCGGCATATTTCAGCACAGCATGGGCAAG
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 GTGCTGCTCCAGGTTTCAAAATATCAGCTTCTGCAATTCTCATGGCAGAAATGCTT
 GATATTGTGATAACCGTCTCCCGCTGCCGTAATCTCAATTCAGGATTCAGTTTGCG
 25 AGGTGCGAAAACGCTGCCGCTCGCAGCAATTCTATGTCGCCCTTATCTGTGCG
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 CCTGATGTTCAAATTCTGGTATTCTAGTGGCAACAGCTGGACTTGGCCCAACTGCG
 30 GGTCTCGGAGCTCCAGGTTTCAATATGGCTTCCAGGATGCGGAGATGGGTAAGG
 CGCGCCGACAGCAGCTCCGCTGCCATCTGCCAGATATGCGATATTGGATTGGCAGTTGAA
 ACCGACACTGCGCTCAATTCTCCGCAATTCCCGCTGATAGACATTCTTTGCC
 35 CGCCGATGCTCCGGCTCTCTGCTCTGTCAGACAAACTGGCCGAGCGTACTGCCAAGG
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 ACCTTCCCTCCGCTTCACTGCCAACGCCCTCTGCTGCAAAACTGCTGATGTT
 GGCAGGCTCACAGGTTCTGCTTATTTGGATAATTGGCGCAAGCGCTCAAAAGCAG
 40 GATGACGATGGGATACGGGATACGGGTTCTGCTCATGGAAATTCCCTAACGGATGCCATCTGCC
 GGCCGATGGGTTCCGGCTGCCGCTGCCAAACCGCTGCCAACTGCGTGGCTTTGCCGAAT
 45 GCTTGGGAAAGGTTGGGCAACTGGCCTGCGATGGCTGCGCTGACGTTGAGCGTTTCCGCCATATT
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 CCAATGCCAACACACTTCCGCAAATTCGGCTCGGGCTGCTTTCAA
 50 ACGAATACCGCAGATACGGCAGCGCTTCCGGTGCCTTCAAGGATTCAGGAAATGCCAGC
 CTATGCTGCTGTTGACAGCGGTATGCTGGCTGAGTTGGTATGCGCTGTAAGCAGGG
 CGAAACCTTGTGCAAAACGGTTGGAAATCGGTCAAGCAGGCTGTAAGCCAGATTATTCAAA
 TCTGAGCGTTATCGGTGCAAGCCTGCAAGCCTTCAAGATCTGAAATCATT
 55 GCTTGGCAAGCGCAGCTGTAACAAACTGACCCGCTGTACCAATGCTCTGCTGTAACCTG
 TATTACTGCCGAGCGGGTTTCTGATAACTCTGTCACCCCTCAAAGCTCCGGT
 60 TATCGGGCAGCTCGACAGGGGAGACATCTGATTTGGACAATTGCTGCGTAAAG
 ACCGCCCTGCTGTCGGSAAGTTCCCGACCCCTGCCGATCTGCCAAGCGCCCTGC
 CGCCGTCACACTGACAGCCGCCAGCGCCAGCACACCTTGTGCAACAGGTTATTCC
 GCGGGGATACTTCCGGACTCTGCTGCTGCTCCGCTGTCCTCTGCTGCAATACA
 65 TCATGCCGCGCTTAGGCCGCCCTGCTCCGCTGTCCTCTGCTGCTGCAATACA
 70 TTTGGCGTAGCCGCTGATAACGGAAAGCACCTTCTTTCGGTTTGCCTGCAATATGCGTG
 CCTGAAATACAGGCTGCAATTCCGGATTGCGTCCAAACGAGCTTAAACCGCAGTAGG
 CATCATCCAGCTGCGAGGAAACGATTCTAATTCCATTCTGCCAGACCGCG
 75 AAAGGTTGGGTGCTGCTGCTGCGAAAAGCCGCTGAGTATTCGGGATATTGCGTG

CAGTCAGACGCAACGTCATTAAGTGGGGGCAATTTCTGATCGAGCTTCGCCAAC
 GCTGCAAAAGCTCGATTGCCCTTCTCTTCCGGCTCCGTACCGTGAACACCATCGG
 CAACCGCCGCTCGGGCAGATGTCATATTCAACGCCGCCGGGAACCGCTTCGATG
 CTTTTGCCCAACCCGCTCTGTGACGGGGCTTGTGCAACAAATAAAAACACCTGC
 5 GCTTCCTGCTCTTGTGACGGCAGCCTCCAGTCCGTCCAGATGCTGATTT
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 GCTCACTCTGCCATTCTGTATAAAATCTTCCGGCTGTCAAAACCGTTCAGCGACA
 CGGCCATTCTCAAGGGCGCTCGGCCACTTCCGGGGATTGTGCGTTCAACATCAGCA
 TATAGGTGCGAGAGCGTCTCCGCTGCCCTTTGCAAGGGGTTCCACATCAGCA
 10 ACCTAAATATCTGATTACCCGCTGCCACTGCGCAAGCGTGGCGCTTCTTGA
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The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 12>:

gnm_12

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30

The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 13>:

gnm_13

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20 AGTACGGCAAGCGGAGGCAACGCTACTGTTAAATTAAATCTAACCAATTAAAGGCTC
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25 GCGCGAGATCTGGTTTGTGCAAGAACAGCCGGCGGATGATACCATTTCTACAGGAC
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35 GCGCAAAACGGTAAACCTGCCAACGATTTGGCGACGTTGGCGCTATCTGGCGGAGCAT
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35 CGAATGGTGGCGGCTGCTTCGGGGCGCTGGAAATGACCGGACCAACTTGGGGCGCG
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40 CGGCAAAACGGCCGCCGCCAGATCGCCGAGCTGGTGTGTTCTGGCGGAGCTTGGCG
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55 GGGGAGGGCGACTCGCCGCCGGAATGMAAANGGTCTGAGAACCTGCTTTCAGCGA
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5 ACACTTTCCGGCACGGCACACCCCGCTGGGCTGCCATGACCTCGCGAAATCCGC
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5 ACACATCAAATCCATCCACGGGATTTGCTTGCACCATATTGACCGCG
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10 CACGACAGCGGAAACAAAAGATGTATCGCAAAATGGAAATGGGATCAAATGGGTC
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20 CCGACACGGCACAGACATGCTCTCATGGACACTCGGACGACGCCCTTATTCGGG
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25 CATTCTCATCAAAAGAATCTTGTCTTGTGGCAAGGAGCTGATTAACCTGGCTCTT
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GCCAACCTGCTGGCGGCCGCTCATTTGCTGACTGCTTACCGCCATCATGCTCCG
CACAAAAATGCGTGAAGAAAATATGGAACCTTCAAAACCTTAAATTGGATTTGTTAATTTAA
30 TTGGCGCTTGGCGCTTGTGTTAGTATTGCTTCAACAGCGGAAAGCGGCCGATGGCG
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The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 14>:

gpm 14

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 55 CCTTATCTAAAAAAACTGGAGCGGGAAACAGGACTCTGCAACTGGCACCTCAACCTGGCA
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5 GGAAACGGAGTCGCACACTCGCACCTCAACCTTGGCAAGGTTGCCTCTACCAACTGAGC
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 GACCTCACCTTGGCAAGGTTGCCTCTACCAACTGAGCTATTCCGCAATGATTGGGA
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 AATTATT

The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 15>:

gnm_15

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 15 GCTGTTGGCTGTTCTGGGCGAGCGGCACTTCCCGCGTAAACACGGCTTGAAGGGAG
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The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 16>:

gnm_16

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The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 17>:

gnm_17

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The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 18>:

5 **gnm_18**

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The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 19>:

gnm_19

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The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 20>:

gnm_20

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The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 21>:

30 **gnm_21**
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 45

The following partial DNA sequence was identified in *N. meningitidis* <SEQ ID 22>:

gnm_22

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